

**DRAFT SCREENING SITE INVESTIGATION
FOR THE
GENERAL SMELTING COMPANY
2901 EAST WESTMORELAND STREET
PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA
ECKEL SITE NUMBER 308**

Prepared for

U.S. Environmental Protection Agency Region 3
Hazardous Property Cleanup Division
1650 Arch Street
Philadelphia, PA 19103

Prepared by

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Remedial Action Contract No. 68-S7-3002
Work Assignment No. 048-PAPA-03ZZ
Project No. I4185.47502.0903

February 7, 2007

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1.0 INTRODUCTION

Under Remedial Action Contract (RAC) No. 68-S7-3002, Work Assignment No. 048-PAPA-03ZZ, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech, Inc. (Tt), to assist EPA Region 3 in the assessment of properties suspected to have been former lead smelter foundries. Tt subcontracted completion of this work assignment to Tetra Tech EM Inc. (Tetra Tech).

Former lead smelter sites nationwide were identified in an April 2001 article published in the American Journal of Public Health by Eckel, and others (Eckel study) (Reference [Ref.] 1). The majority of these lead smelters operated prior to 1964 and closed before the current environmental regulations were instituted. As part of the Eckel study, soil samples were collected from several of the identified former lead smelter properties. Results from the analysis of these soil samples indicated that concentrations of lead exceeded EPA's recommended screening level for lead in residential soils. The results of the Eckel study indicate that the air disposition of lead into soils from the former smelter operations may present an ongoing public health concern due to exposure of residential populations, especially children, located in the vicinity of these former lead smelters, to soils containing elevated concentrations of lead (Refs. 1, 2, and 3).

The Eckel study identified 77 properties that may have been formerly used as lead smelters within EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia). EPA Region 3 is currently investigating these 77 properties. The objective of EPA's investigation of these properties is to (1) determine the potential for lead-contaminated soil to be present at the former lead smelter site or nearby properties (2) identify any populations that may be at risk to exposure to this soil, and (3) determine if soil sampling is warranted at any of these sites or nearby properties.

The following activities were completed as part of the initial screening investigation of each of these former lead smelter sites: (1) verify the former lead smelter address listed in the Eckel study through historical Sanborn fire insurance maps, tax parcel information, and/or contacting local agencies, (2) determine if the site is listed in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, (3) determine through census information and existing maps the number of schools, daycare centers or recreational parks that exist near the former lead smelter site, (4) determine the population residing within a 4-mile radius of the site, (5) conduct a windshield reconnaissance of the site and surrounding area to document the current land use, identify any exposed soil and verify the existence of any schools, daycare centers or parks in the immediate area, and (6) review all information acquired to determine if the collection and analysis of soil samples is warranted at the site or at any nearby property.

This report summarizes the findings of the tasks outlined above for the former lead smelter known as the General Smelting Company site located at 2901 East Westmoreland Street, Philadelphia, Pennsylvania, 19134. Each former smelter property was given a number in Eckel's study. The Eckel study number for this site is 308 (Ref. 1).

2.0 SITE LOCATION

The former General Smelting Company facility was located 2901 East Westmoreland Street, Philadelphia, Pennsylvania, 19134. The geographic coordinates of the former General Smelting Company facility are 39.983103° north latitude and 75.097788° west longitude on the Camden, New Jersey-Pennsylvania Quadrangle, 7.5 minute series, United States Geological Survey topographic map (see Appendix A, Figure 1). The site is not currently listed in EPA's CERCLIS database (Ref. 4). An aerial photograph of the vicinity of the former lead smelter site has been included in Appendix A, Figure 2. This aerial photograph reveals the exposed soils and any identified areas of potential concern such as schools, daycare centers, or parks located within a half-mile radius of the site.

3.0 SITE OBSERVATIONS

On September 6, 2005, Tetra Tech completed a non-sampling windshield reconnaissance of the General Smelting Company site and surrounding area. A photographic record of the current site conditions is included in Appendix B. Figure 3, shows the current layout of the site and surrounding area as observed during Tetra Tech's site reconnaissance. The following observations were recorded:

- The exact location of the subject property could not be identified. The address of 2901 East Westmoreland Street was not located during the site reconnaissance. The location of the former lead smelter is most likely in the area of the Interstate 95 overpass.
- William Parker Associates, Inc, a catalog warehousing company, is located at 2845 Westmoreland Street.
- Baseball fields are located directly southwest of the probable location of the former lead smelter. A playground containing baseball fields is located on the west side of Westmoreland Street, north of Interstate 95.
- The area north of Interstate 95 is predominantly residential. The area south of Interstate 95 is predominantly industrial and commercial.
- The Delaware River is located approximately one-half mile south of the subject property.
- No schools or daycare centers were observed in the immediate vicinity of the subject property,
- Exposed soils exist in the immediate vicinity of the subject property.

4.0 POTENTIAL TARGETS

Potential targets identified that may be exposed to lead-contaminated soils remaining in the vicinity of the former General Smelting site include visitors to the recreational fields located in the nearby vicinity of the site. The population within a 4-mile radius of the site is summarized in the table below (Ref. 5).

Population within a Four-mile Radius of the Site

Distance Ring (miles)	Population (number of persons)
0.0 to 0.25	1,380
0.25 to 0.5	6,367
0.5 to 1.0	15,608
1.0 to 2.0	89,437
2.0 to 3.0	152,419
3.0 to 4.0	249,329

Source: U.S. Department of Commerce. Landview V Environmental Mapping Software based on the Bureau of Census 2000 Population Data. December 6, 2005.

No schools or daycare centers have been identified in the area directly surrounding the site. No daycare facilities were identified within one-half mile of the site. Three schools were identified within one-half mile of the site. Martin school and St. Alberts School are located approximately 1,000 feet north and northeast of the site, respectively. Nativity School is located approximately one-third mile northeast of the site. Richmond Playground is located less than 500 feet north of the probable former location of the lead smelter and a second sports field is located directly south of this area. Allegheny Square Park is located approximately one-third mile northeast of the site.

5.0 FINDINGS AND RECOMMENDATIONS

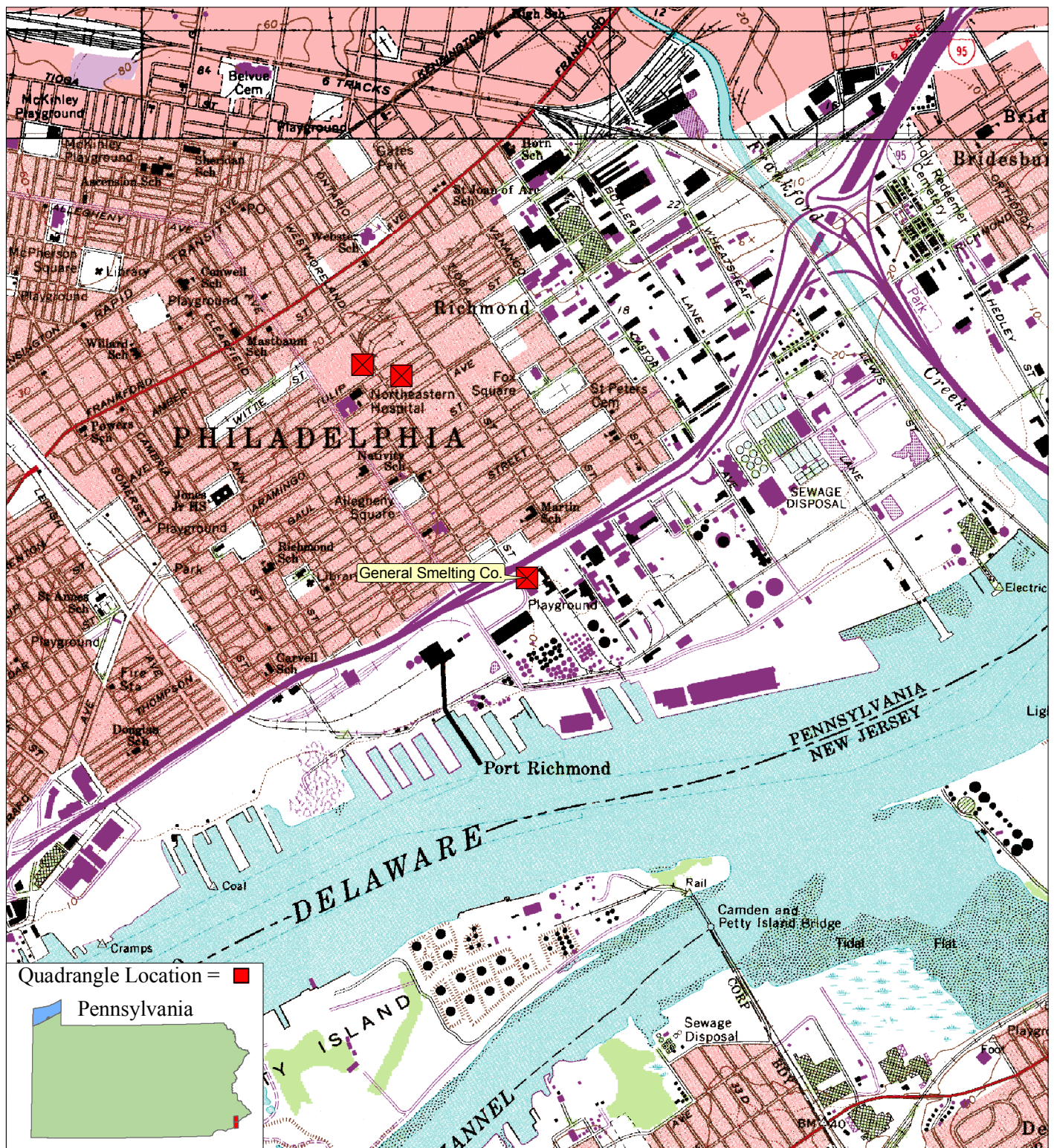
The site is located in a predominantly industrial and commercial area of Philadelphia, Pennsylvania. Exposed soils were observed in the nearby vicinity of the property formerly used as a lead smelter. A playground and a baseball field are located in the immediate vicinity of the probable location of the former lead smelter; therefore, to determine if there is a threat to visitors to these areas due to elevated levels of lead in soils, it is recommended that soil samples be collected from the playground and baseball field and analyzed for lead levels.

REFERENCES

1. Eckel, W.P., Rabinowitz, M.B., Foster, G.D. American Journal of Public Health. "Discovering Unrecognized Lead-Smelting Sites by Historical Methods". April 2001.
2. Pennsylvania Department of Health. Suspected Former Lead Smelter Sites: A Potential Risk Factor for Childhood Lead Poisoning. August 2004.
3. U.S. Environmental Protection Agency (EPA). Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July 14, 1994.
4. U.S. EPA. Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) database. On-Line Address: <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>
5. U.S. Census Bureau. State and County Quick Facts. Accessed On-Line on December 6, 2005. On-Line Address: quickfacts.census.gov/qfd/states/42.html.

Appendix A

Figures



0 0.25 0.5
Miles
Scale in Miles

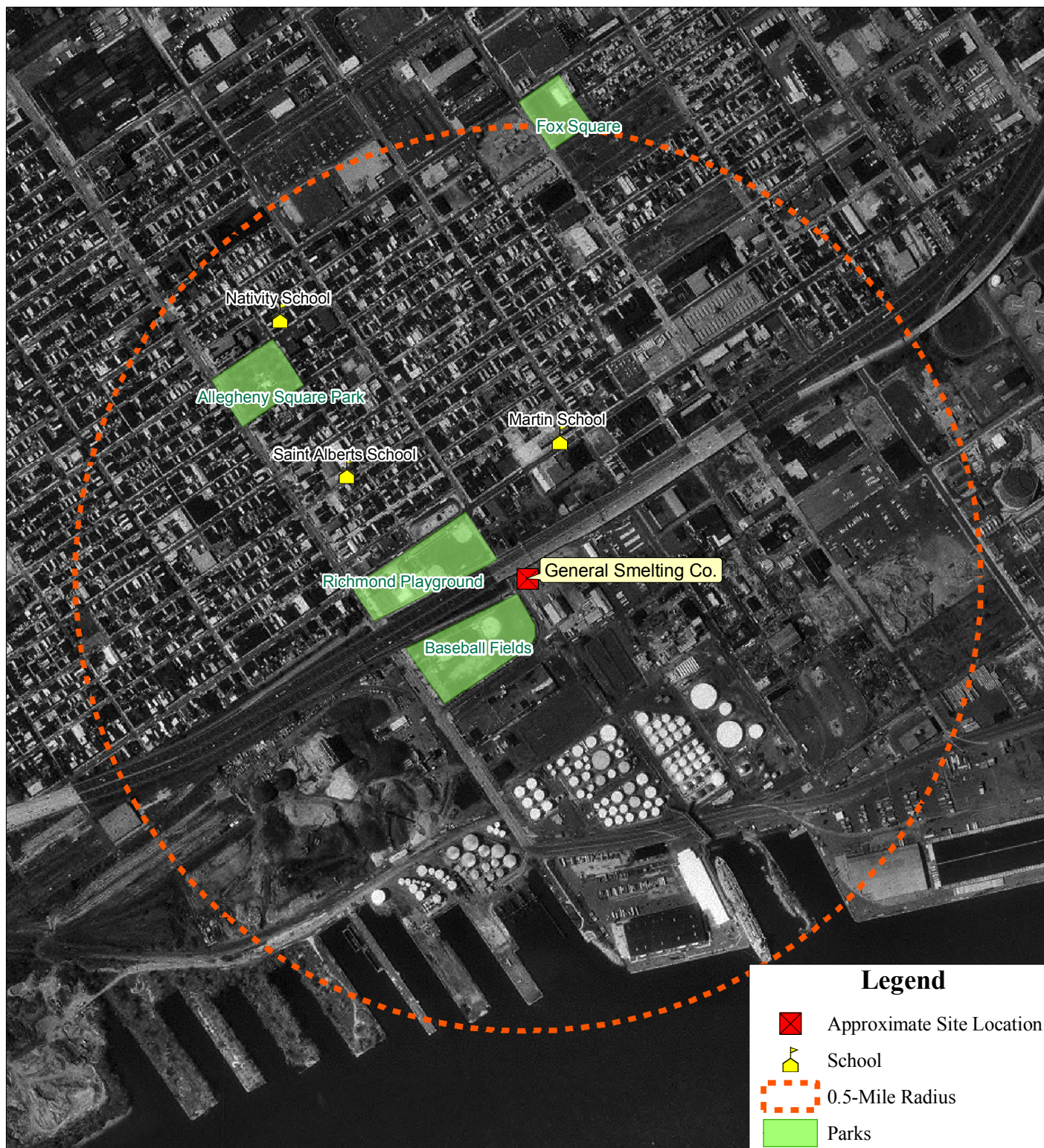
General Smelting Co.
2901 East Westmoreland Street
Philadelphia, Pennsylvania
Eckel Site No. 308



Figure 1
Site Location Map

Source: Modified from USGS 7.5-Minute Series Topographic Quadrangles,
Camden, New Jersey - Pennsylvania, 1995
Frankford, Pennsylvania-New Jersey, 1997





0 500 1,000
 Feet
 Scale in Feet

General Smelting Co.
 2901 East Westmoreland Street
 Philadelphia, Pennsylvania
 Eckel Site No. 308

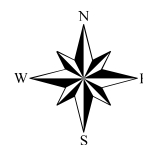
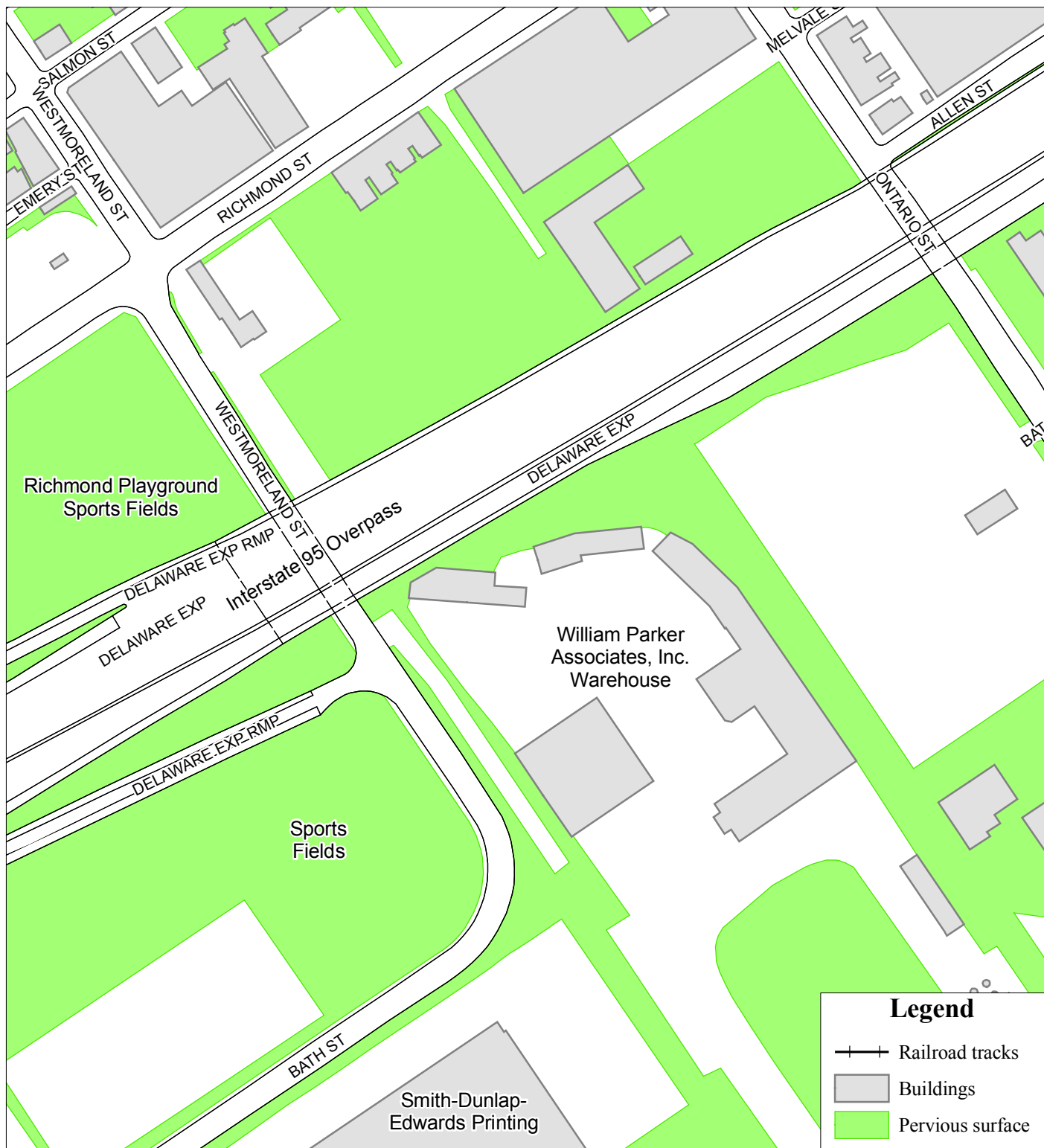


Figure 2
 Aerial Photograph

Source: Modified from Digital Orthophoto (DOQQ) MrSID mosaic for Camden Quadrangle (NAPP III, 1997-2001)





Appendix B
Photographic Documentation



Photographic Documentation

Site Name: General Smelting Company – Eckel Number 308
Location: 2901 East Westmoreland Street, Philadelphia,
Pennsylvania

Prepared by: Tetra Tech EM Inc.
Photographer: [REDACTED]

Photograph No. 1

Photograph Date:
September 6, 2005

Description: View of William
Packer Associates and Interstate
95.



Photograph No. 2

Photograph Date:
September 6, 2005

Description: View facing
southeast from Westmoreland
Street of the William Parker
Associates warehouse.





Photographic Documentation

Site Name: General Smelting Company – Eckel Number 308

Prepared by: Tetra Tech EM Inc.

Location: 2901 East Westmoreland Street, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 3

Photograph Date:
September 6, 2005

Description: View of ballpark located on the west side of Westmoreland Street.



Photograph No. 4

Photograph Date:
September 6, 2005

Description: View facing southeast of Westmoreland Street.

